

### **SECTION 5: EXISTING CONDITIONS**

#### Introduction

The purpose of this section is to describe and document existing issues and opportunities in the study area. The review of existing conditions results in a baseline for future analysis. Understanding the base conditions of the study area led to defining the needs and challenges facing the study area, which then led to the development of recommendations intended to address these needs and challenges. The issues and opportunities are described in the following major topic areas throughout this section:

- Transportation
- Demographics
- Real Estate and Development
- Land Use
- Historical Properties
- Urban Design
- Previous Plans and Studies

The study team examined the existing conditions by using a strengths, weaknesses, opportunities and threats (SWOT) analysis. As stated above, this analysis examined socio-economic, traffic condition, land use, and real estate market trends data in order to determine the potential for redevelopment and revitalization and to identify the infrastructure improvements needed to support and encourage it. After extensive public involvement and stakeholder coordination, the preliminary SWOT analysis of the existing conditions were identified and summarized as the following:

#### Major Strengths/Opportunities

- Access to MARTA
- Convenience to Interstate 20, Interstate 285
- Historical Aspects
- Older, Stable Residents
- Good Market Base (Buying Power of Students and Faculty)
- Opportunities / Potential

#### Major Weaknesses/Threats

- Maintenance and City Services
- Drugs / Crime / Public Safety
- Parking and Traffic (Cruising)
- Blight
- Not Pedestrian Friendly
- Need Better Retail
- Land Use (Reconcile Scale and Density of Traditional Low Rise Development with New Standards)
- Stakeholders also outlined other general issues/concerns they face



#### **Transportation**

The transportation existing conditions sub-section describes transportation strengths, concerns, demands and deficiencies as they relate to the efficient movement (access and mobility) of people and goods in the corridor. The inventory identified needs and deficiencies that were one piece of the puzzle that led to the development of recommended transportation solutions. The existing transportation conditions inventory and analysis included the following:

- Traffic information including AADT (AM and PM Peak Hour)
- Existing and future LOS analysis
- Proposed RTP and TIP projects
- Safety and Accident Data
- CMS
- Existing Transportation Infrastructure
- Transit Service
- ARC Bicycle Sufficiency Ratings

### Traffic information including AADT (AM and PM Peak Hour)

The traffic count data for this planning element was obtained from two sources: the current GDOT sources as well as the 2004 and 2030 traffic counts from the ARC Travel Demand Model. The GDOT counts are classified using the most current Annual Average Daily Traffic (AADT) volumes from 2000 and 2003 and are displayed in the graphic by non-directional counts (in both directions). The counts from the travel demand model are on the following three pages. GDOT website and ARC Database provide 24-hour volume counts, known as Annual Average Daily Traffic, or AADT's. These counts help determine whether roadways have a sufficient number of lanes to carry their average volume. These counts are usually more accurate than the travel demand model data. The model takes into account numerous regional transportation improvement projects that may or may not become a reality over the lifespan of the plan. GDOT numbers come from annual manual counts. That is why the GDOT traffic counts are the most reliable for this study.

In general, two-lane, undivided roadways can carry about 16,000 to 17,000 vehicles per day. Four-lane undivided roadways can carry about 38,000 vehicles per day. Four-lane divided roadways can usually carry up to 45,000 vehicles per day since they usually include periodically spaced left turn lanes. The current available traffic counts indicate that the corridor does not experience serious traffic or congestion problems. Traffic volume fluctuates from 14,000 vehicles a day to 26,000 vehicles a day along the corridor. The capacity of the corridor is impacted by fluctuations in number of lanes. from the corridor has three undivided lanes from Northside Drive to Lowery Boulevard, four undivided lanes from Lowery Boulevard to H.E. Holmes Drive and four undivided (for the most part) lanes with a center turn lane from H.E. Holmes Drive to Fulton Industrial Boulevard. The MLK Jr. Drive volumes of 14,000 – 26,000 equate to a Level of Service (LOS) of B-C, which the next section explains in more detail.

We can evaluate future year AADT's estimated against the existing roadway characteristics and determine which roads will require improvements (widening) by looking at the Volume to Capacity (V/C) ratios in order to come up with a LOS analysis. The LOS is calculated by taking the traffic



volume for a roadway (AADT) and dividing it by the design capacity for that roadway. The capacity analysis used is based on Highway Capacity Software (HCS) Analysis (Chapter 7) and uses the standard for roadway types shown in Figure 5-1.

Figure 5-1: Highway Capacity Analysis

Roadway Type	Typical Capacity
2-Lane Undivided	16,000 Vehicles
4-Lane Undivided	38,000 Vehicles
4-Lane Divided	45,000 Vehicles
6-Lane Divided	67,000 Vehicles
8-Lane Divided	80,000 Vehicles

### Existing and future LOS analysis

The following table provides detailed information about the corridor's roadways. As stated earlier, the annual average daily traffic (AADT) counts shown are from the most recent and available GDOT counts. The LOS column represents an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristics of the facility. Typically, local governments determine the LOS that is acceptable to the community. Normally, a minimum Level of Service 'D' (high density, stable flow) should be maintained for peak travel times near major commercial and industrial areas, freeway interchanges, and central business districts in cities. Figure 5-2 shows the typical LOS classification thresholds.

Figure 5-2: Level of Service Indicators

LOS	General Characteristics	V/C Ratio	Average Delay in Seconds
Α	Free flow traffic with individual users virtually unaffected by the presence of others in the traffic stream	.0025	< 10
В	Stable traffic flow with a high degree of freedom to select speed and operating conditions but with some influence from other users	.2555	10 - 20
С	Restricted flow which remains stable but with significant interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level	.5577	20-35
D	High-density flow in which speed and freedom to maneuver are severely restricted and comfort and convenience have declined even though flow remains stable	.7793	35-55
Е	At capacity; unstable flow at or near capacity levels with poor levels of convenience and comfort, very little, if any, freedom to maneuver	.93 – 1.00	55-80
F	Forced traffic flow in which the amount of traffic approaching a point exceeds the amount that can be served. LOS F is characterized by stop-and-go waves, poor travel times, low comfort and convenience and increased accident exposure	< 1.00	> 80

Source: Transportation Research Board, Highway Capacity Manual, 2000 update



As Figure 5-3 shows, the MLK Jr. Drive corridor currently functions at an acceptable LOS (typically minimum LOS D), which is typical for the peak hour travel for areas near interstate interchanges and along major commercial areas. Figure 5-3 also shows LOS for locations with existing traffic count information along the corridor.

Figure 5-3: Level of Service - MLK Jr. Drive Corridor

Location	# of Lanes	AADT	LOS
Between Lowery Station and West Lake Station	4 Undivided	16,000-17,000	В
Between H.E. Holmes Drive and Lynhurst Drive	4 Divided	20,000-21,000	В
Between I-285 and Fairburn Road	4 Divided	26,000-27,000	С
Between Interstate 20 and Fulton Industrial Boulevard	4 Divided	16,000-17,000	В

LOS alone does not explain the current traffic conditions along the corridor. While the LOS shows that the corridor maintains an acceptable level, many drivers who use the corridor might find that fact surprising. They may not believe it reflects the level of frustration they feel when driving the corridor. As in other areas in the region, they think the major facilities along the corridor are congested and not operating efficiently. While the roadways function adequately from merely a traffic volume perspective, other issues exist along the corridor that frustrates drivers. For instance, the prominence of driveways, lack of sidewalks, inconsistent streetscape, and long, continuous curb cuts that motorist on MLK Jr. Drive encounter can create a negative driving experience (as well as create dangerous conditions for pedestrians). Often, the intersections do not adequately accommodate all users, particularly the needs of the physically challenged. Other frustrating conditions include the lack of signage directing people to existing transit service along the corridor, in addition to a lack of other amenities for riders. Finally, there have been requests to beautify the corridor with signage, and streetscape enhancements. These issues along with other detailed transportation information will be further analyzed in this report.

#### Proposed RTP and TIP projects

The Regional Transportation Plan (RTP) is a long-range plan that includes a balanced mix of projects such as bridges, bicycle paths, sidewalks, transit services, new and upgraded roadways, and safety improvements (just to name a few). As the federally designated Metropolitan Planning Organization (MPO) for the Atlanta region, the Atlanta Regional Commission (ARC) develops the RTP for the metro Atlanta region by cooperating with municipal, county and state agencies, public transit operators, other stakeholder groups and the general public. By federal law, the RTP must cover a minimum planning horizon of 20 years and be updated every three years in areas which do not meet federal air quality standards (such as the Atlanta region). The long-range RTP forms the basis upon which an annual short-range Transportation Improvement Program (TIP) is developed. The TIP allocates federal funds for use in construction of the highest priority transportation projects in the near term of the RTP. Federal law requires consistency between the TIP and the long-range objectives of the RTP and must have a balanced budget.

ARC adopted its most recent RTP, Mobility 2030, in 2005. It addresses the current and expected demands on the region's transportation system. Mobility 2030 meets federal transportation



planning requirements, satisfies federal air quality requirements and is financially constrained in that the recommended projects and investment strategies reflect the expected level of funding that will be available over the next 25 years for both construction and operations/maintenance. The four goals for Mobility 2030 are:

- 1. Improve accessibility and mobility options for all people and goods.
- 2. Maintain and improve system performance and preservation.
- 3. Protect and improve the region's environment and quality of life.
- 4. Increase the safety and security of the transportation system.

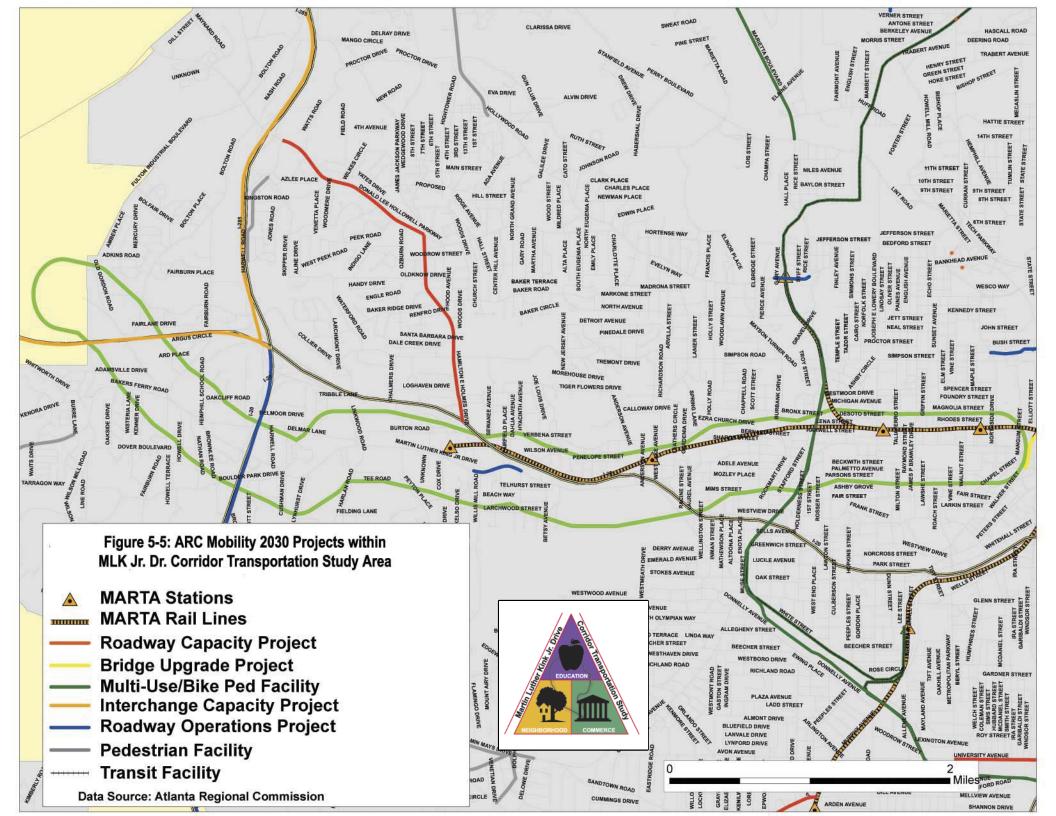
Based on previous studies and other community issues, the City of Atlanta included projects relevant to the study area in Mobility 2030 and the 3-year TIP for 2005-2010. Figure 5-4 shows these projects. The MLK Jr. Drive roadway operations upgrade project for the corridor from H.E. Holmes Drive to Barfield Avenue currently has a 2020 network year. The network year is the time when GDOT will have the project completed and drivers will start using the upgraded facility. This study has recommended moving up the network year for this project.

Figure 5-4: 2030 RTP/2005-2010 TIP Projects - Study Area

Project Name	Project Type	Programmed Dollars	Network Year
I-20 West – Widening from I-285 to Fulton Industrial Boulevard	Roadway Capacity (8-10 lanes)	\$20,000,000	2015
I-20 Noise Barriers from Fulton Industrial Boulevard to H.E. Holmes Drive	Other (Noise Barriers)	\$7,754,000	2010
I-20 West HOV Lanes from H.E. Holmes Drive to Thornton Road	HOV Lanes	\$80,000,000	2015
H.E. Holmes Drive – widening from I-20 to U.S. 278 (Bankhead Avenue)	Roadway Capacity (2-4 lanes)	\$8,158,000	2030
MLK Jr. Dr. (SR 139) upgrade from H.E. Holmes Drive to Barfield Avenue	Roadway Operations Upgrade	\$4,091,300	2020

Figure 5-5 on the next page maps the RTP/TIP project locations and displays their relationship to the corridor.









### Safety and Accident Data

Accident data for this corridor study was obtained from the GDOT Road Classification (RC) Database. The study team coordinated with GDOT and ARC in order to overcome various issues that make mapping data from these accident databases difficult. The study team carefully evaluated the accident locations in order to properly determine future transportation strategies and improvements. Data limitations made detailed analysis impossible. For example, the ARC shape files often show accidents that occurred on streets other than MLK Jr. Drive that parallel the corridor. This resulted in unusually high accident numbers. The study team analyzed the list of accidents attributed to MLK Jr. Drive and came up with the accidents that actually occurred on the MLK Jr. Drive Corridor. This analysis included a review of collision data to determine whether the collision was a right-angle collision, left turn collision, or rear-end collision. Detailed analysis was not possible though so we were not able to include the direction of travel, intersection geometry, traffic signal operation (or absence of a traffic signal), vehicle speeds, etc. In other words, a more detailed crash analysis can determine a probable cause for the crashes and recommend more solutions. Once completed, the future analysis and the corresponding solutions can and should be part of an on-going, annual safety review of the MLK Jr. Drive corridor.

The project team is aware that future analysis of these accident locations and their characteristics will be important in factoring a current trends/needs analysis as well as determining future transportation projects. In the recommendations section of this report, the project team came up with projects and strategies to address the accident characteristics for this corridor. The following pages show map the locations of the collisions/accidents for 2002-2004 based on the GDOT RC Database for this corridor study. Figure 5-6 maps 2002, Figure 5-7 maps 2003 and Figure 5-8 maps 2004.

